

Time	Topic	Trainer
Day 1 - Monday 12 May 2014		
12:00	Registration and Lunch	
13:00	An introduction to the EBI	L. Emery
13:30	Standards and databases for computational modelling of biological processes (TBD)	N. Le Novere
14:30	Logic models of signalling networks: from Boolean to differential equations	J. Saez-Rodriguez
15:30	Tea/coffee break	
16:00	Practical session: Logic modelling with CellNOpt and Cyrface.	J. Saez-Rodriguez, E. Gonçalves, T. Cokelaer
16:00	Programmatic access to relevant web services with Bioservices	Cokelaer
18:00	Networking activity	L. Emery
18:15	Poster session	
19:30	Dinner at Hinxton Hall	
Day 2 -Tuesday 13 May 2014		
9:00	Visualization through dimensionality reduction	N. Lawrence
10:00	GPY: A Gaussian process framework for dynamical biological models	N. Lawrence
11:00	Tea/coffee break	
11:30	Fourier transform analysis of dynamical differential equations for biological Models	M. Niu
12:30	Lunch	
13:30	Inference methods for biological networks	D. di Bernardo
14:30	Reverse engineering and modelling of metabolic networks: the case of Mendelian disorders	R. Pagliarini
15:30	Tea/coffee break	
16:00	Identifiability and parameter estimation in dynamic models	E. Balsa-Canto
17:00	Practical parameter estimation with COPASI	P. Mendes
18:00	Parameter estimation in large-scale kinetic models of microorganisms	A.F. Villaverde
19:00	Dinner at Hinxton Hall	
Day 3 - Wednesday 14 May 2014		
9:00	Optimal design of dynamic experiments	J.R. Banga
10:00	Tea/coffee break	
10:30	Practical session on parameter estimation and optimal experimental design	A.F. Villaverde
11:30	Uncertainty quantification analysis of biochemical models and optimal experimental design	J.G. Blom
12:30	Lunch	
13:30	Model selection and optimal experimental design	M. Navarro
14:30	Practical session: uncertainty quantification, model selection, and optimal experimental design	M. Navarro
15:30	Tea/coffee break	

16:00	Reverse-engineering pattern-forming gene networks in animals	Y. Jaeger, A. Crombach, J. Kaandorp
17:00	Practical session: work on your own data	
18:30	Dinner at Hinxton Hall	

#### Day 4 - Thursday 15 May 2014

9:00	Simulation work flows in model life cycle	B. Moreau
10:00	Tea/coffee break	
10:30	BioPreDyn software practical	B. Moreau
12:00	Lunch	
13:00	Kinetic modelling and simulation of CHO cells	S. Bongard
14:00	Tea/coffee break	
14:30	Large-scale kinetic models of E. coli and yeast	P. Mendes J. Danno
15:30	Metabolic engineering case studies	Dyckjær
16:30	Course feedback and wrap up	L. Emery